

Amendments to the Claims

This listing of claims will replace all previous versions, and listings of claims in the application:

Claims 1-6. CANCELED

7. (Original) A transistor, comprising:

an emitter and a collector, or a base made of a transparent n-type semiconductor such as ZnO doped with group III elements or group VII elements;

a base, or an emitter and a collector made of a transparent p-type semiconductor such as ZnO doped with group I elements or group V elements; and

a base electrode, an emitter electrode and a collector electrode, in which a transparent conductive material such as conductive ZnO doped or undoped with any one of group III elements, group VII elements and group I elements, a transparent conductor or an untransparent electrode material are used partially or entirely, the base electrode, the emitter electrode and the collector electrode being respectively formed on said base, said emitter and said collector.

8. (Original) A semiconductor device, comprising:

the transistor according to claim 7; and

a light emission portion formed of a region continuous to said collector or said emitter of said transistor or a region of another semiconductor connected to said collector or said emitter, and a semiconductor layer jointed to said region.

9. (Original) A semiconductor device, comprising:

the transistor according to claim 7, and a capacitor formed of a region continuous to said collector and said emitter of said transistor or a region of another semiconductor or a conductor connected to said collector or said emitter, an insulating layer on said region, and a semiconductor layer or a conductive layer on said insulating layer.

Claims 10- 12. CANCELLED

13. (NEW) A semiconductor device, wherein the transistor according to claim 7 is stacked in plural with an insulating layer therebetween, the insulating layer using a transparent insulating material such as insulative ZnO doped with elements capable of taking a valence of one as a valence number or group V elements, a transparent insulating oxide, or a transparent insulator.

14. (NEW) A semiconductor device, comprising:

a plurality of transistors according to claim 7, wherein a transparent conductive material such as conductive ZnO doped or undoped with group III elements, group VII elements, group I elements and group V elements, a transparent conductor such as In_2O_3 , SnO_2 and $(\text{In}\cdot\text{Sn})\text{O}_x$, or a untransparent electrode material is used for all of wiring or a part of the wiring between said transistors.

15. (NEW) A semiconductor device, comprising:

the transistor according to claim 7;

an inductor made of a transparent conductive material such as conductive ZnO doped or undoped with group III elements, group VII elements, group I elements and group V elements, or a transparent conductor such as In_2O_3 , SnO_2 and $(\text{In}\cdot\text{Sn})\text{O}_x$.

16. (NEW) A semiconductor device, wherein a plurality of the semiconductor devices according to claim 8, are arranged in a matrix shape, and a capacitor or a light emission portion is driven by each transistor.

17. (NEW) A semiconductor device, wherein a plurality of the semiconductor devices according to claim 9, are arranged in a matrix shape, and a capacitor or a light emission portion is driven by each transistor.

18. (NEW) A method of making a transistor, comprising:

depositing an emitter and a collector, or a base made of a transparent n-type semiconductor such as ZnO doped with group III elements or group VII elements;

depositing a base, or an emitter and a collector made of a transparent p-type semiconductor such as ZnO doped with group I elements or group V elements; and

depositing a base electrode, an emitter electrode and a collector electrode, in which a transparent conductive material such as conductive ZnO doped or undoped with any one of group III elements, group VII elements and group I elements, a transparent conductor such as In_2O_3 , SnO_2 and $(\text{In}\cdot\text{Sn})\text{O}_x$, or an untransparent electrode material are used partially or entirely, the base electrode, the emitter electrode and the collector electrode being respectively formed on said base, said emitter and said collector.